

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

Plastics One

Virginia's A.L. Philpott Manufacturing Extension Partnership

Plastics One + Lean Manufacturing = Success

Client Profile:

Plastics One has served its customers for over 50 years with custom design and manufacturing of a full range of products and services including miniature connector and cable systems, insert and injection molding and tool and design engineering from their Roanoke, Virginia, facility. From improving upon existing hearing aid cords in the early 1950's to manufacturing cable assemblies used for medical diagnostics and treatment, Plastics One has continued to develop its ability to meet the myriad needs of its diverse customer base. Diversity is also a characteristic of its workforce. Approximately 200 employees representing many nationalities work in a time-sensitive, customer-oriented, quality-driven environment where training includes intricate hand operations used in the Connector and Cable Systems division and machine operations of 5 to 550 ton semi-automatic injection molding machines in the Custom Injection Molding division.

Situation:

Plastics One had been interested in utilizing lean manufacturing techniques in its manufacturing operations for several years in order to reduce costs and increase profitability. In the past several years, Virginia's A.L. Philpott Manufacturing Extension Partnership (VPMEP), a NIST MEP network affiliate, had provided 6 workshops on the principles of lean manufacturing to company employees. These principles were adapted in a single work center with very good results. However, Plastics One management noted that continued improvements in the manufacturing operations began to wane. Senior management was anxious to continue the lean implementation process throughout the entire facility and permanently change the organization's climate from traditional to lean manufacturing. Once again Plastics One turned to VPMEP for help.

Solution:

VPMEP project manager, Steve Nattsas, suggested that Plastics One increase its lean efforts in the Connector and Cables Systems manufacturing area to reduce work in process and lead-time. By using the CCS product line as the initial transformation focus, all personnel at Plastics One gained a first-hand view of how lean manufacturing can improve an organization. The lean transformation in the Connector & Cable Systems division allowed Plastics One to sway a major customer's desire to take their business to China. Because of their lean strategies, Plastics One reduced manufacturing costs, lead times, and improved product quality to a level that they were able to fully meet their business here in America.

Results:

- * Reduced inventory by 15 percent.
- * Produced a cost savings of \$63,731.

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- * Increased sales by \$400,000.
- * Retained business in America with sales retention of over \$1.2 million.
- * Invested in plant/equipment.
- * Implemented lean manufacturing in all departments.
- * Improved employee morale and performance.

Testimonial:

"VPMEP provided class room training first to bring the concept of lean to our employees. We then used an onsite consultant, Steve Nattsas, to help us implement our first cell and then guide us through the second. Once we got the hang of it we began doing our own value stream maps and setting up the process on our own with Steve's consultation. At the start, having Steve on sight and giving assignments for each return visit helped keep our initiative moving. Without Steve the transformation would have ground to a halt and not been successful. We found it key to have Steve available to help us keep moving."

David Wallenborn, President and CEO